Guidance for Recreational Projects Upper Clark Fork River Basin Restoration Grants

Prepared by Montana Natural Resource Damage Program, in consultation with the UCFRB Advisory Council April 2003

ABSTRACT

As part of its lawsuit against ARCO for injuries to natural resources in the Upper Clark Fork River Basin, the State of Montana sought damages to compensate for the public's loss of use of these injured natural resources. These compensable damages covered, in part, the public's lost recreational uses associated with the injured aquatic, riparian, and upland terrestrial resources in the Basin, such as fishing, hunting, picnicking, hiking, walking, water-play, and open space enjoyment. The State used a recreational valuation study and a contingent valuation study to assess the compensable value damages of these lost recreational services.

Through a 1999 partial settlement of its lawsuit, the State received, among other awards, \$129 million for natural resource damages. By law, these damage funds can be used for the restoration, replacement, or acquisition of the equivalent of the injured resources and/or lost services. Recreational projects can meet this legal threshold criterion through restoration actions or replacement actions. Restoration actions help return the injured resources to their uncontaminated condition, thereby also restoring the lost recreational services that those resources would have provided if they had not been injured. Replacement actions create, improve, or acquire resources and/or services that are the same as or substantially similar to those that were injured or lost, but away from the immediate site of injury. The key to assessing whether a recreational project meets the legal threshold for funding is comparing how similar the recreational services the project would provide are to the lost recreational services covered under Montana v. ARCO. This guidance provides details on those lost recreational services.

I. Introduction

This guidance serves to assist persons or entities seeking to apply for Upper Clark Fork River Basin (UCFRB) restoration grant funds for a recreational project. Legal requirements restrict the type of recreation projects that are eligible for such funding; the projects must be natural-resource related and similar to the type of recreation addressed in the State's Natural Resource Damage (NRD) lawsuit, Montana v. ARCO. The guidance provides background on that lawsuit, the legal requirements for grant funding, examples of eligible and ineligible projects, a checklist to follow, and answers to frequently asked questions about recreational projects.

Given the variety of possible recreation projects and the need to maintain flexibility, this guidance remains general in nature. It serves best to help potential applicants determine whether

a project idea might be eligible for grant funding based on the legal threshold criterion and what projects are most likely to best meet that legal threshold criterion. This guidance supplements the *UCFRB Restoration Plan Procedures and Criteria*, which provides the legal and policy framework for the expenditure of UCFRB restoration funds. There are other criteria, in addition to the legal threshold criterion, that affect a project's eligibility for funding which are not addressed in this guidance. Funding decisions are made on a case-by-case basis and this document does not constitute any pre-determination of the funding eligibility of any specific project.

II. Background

Decades of mining and mineral processing operations in and around Butte and Anaconda released substantial quantities of hazardous substances into the UCFRB between Butte and Milltown. These hazardous substances extensively injured the area's natural resources. On behalf of Montanans, the State filed a natural resource damage (NRD) lawsuit in 1983 to recover damages for injuries to the public's natural resources in the Upper Clark Fork River Basin (UCFRB). The Montana v. ARCO lawsuit, brought under federal and state Superfund laws, contended that decades of mining and smelting in the Butte and Anaconda areas by ARCO and its predecessors, most notably the Anaconda Company, had greatly harmed the public's natural resources in the Basin and deprived Montanans of their use.

The state and federal Superfund laws provide a two-pronged approach for dealing with areas contaminated by hazardous substances:

- remediation cleaning up the hazardous substances so that the public and environment are protected against further harm; and
- restoration returning the injured resources to their uncontaminated or "baseline" condition -- the condition the resource would have been in had the hazardous substance not been released.

There are two types of natural resource damages under Superfund:

- "Restoration Cost Damages" are the costs necessary following remediation to restore the injured natural resource and/or the services it provides to their baseline condition. "Services" are the biological and physical functions a resource provides for the public or another resource. For example, fish provide recreational service for the public and also provide food for otters, eagles and other predators.
- "Compensable Value Damages" are the costs to compensate the public for the lost use of the natural resources and their intrinsic value. These are measured by estimating the value of the benefits the resources would have supplied if the resources had not been injured. An example is the value of lost recreational fishing and hunting use.

Recreational Services under Montana v. ARCO

Montana v. ARCO covered lost recreational services and other services via the compensatory damage portion of the lawsuit. The Department of Interior (DOI) NRD regulations define compensable value as "the value of lost public uses of the services provided by the injured resource, plus lost nonuse values such as option, existence, and bequest values."

These values are measured by estimating the value of benefits the resources would have supplied if the resources had not been injured. Use values refer to the monetary values of activities by individuals that are affected by natural resource injuries. Examples of lost use values resulting from injuries to natural resources in the UCFRB include the value of lost fishing and hunting opportunities. Nonuse or passive use values refer to the monetary values individuals would pay to protect or enhance resources for purposes not related to their own use. Nonuse values include the value of having the option to use a resource, the value of being able to bequest the resource to future generations, and the value that society holds simply for the existence of a resource.²

The Natural Resource Damage Program (NRDP) used two studies to develop the State's compensatory damage claim: a recreation valuation study³ and a contingent valuation study.⁴ Both these studies are summarized in the NRDP's January 1995 "Compensable Natural Resource Damage Determination." Table 1 summarizes what service flows were valued in these two studies and provides a breakdown of the compensable claim associated with the injuries to aquatic, terrestrial, and groundwater resources.

Table 1. Summary of Compensable Damage Claim

Injured Resource	Population Group and Study Used	Damage Claim in millions of \$\$ (M) (1997 present value)	% of Total Compensable Damage Claim
Aquatic Resources and	Non-Resident (RDM)	45.9 M	
riparian habitat			43%
	Resident (CVM)	130.7 M	
Terrestrial Resources –	Non-Resident	Not quantified	
upland soils, vegetation			27%
wildlife and wildlife	Resident (CVM)	112.4 M	
habitat	, , ,		
Groundwater Resources	Non-Resident	Not quantified	
			30%
	Resident (CVM)	121.5 M	
Total		410.5 M	100%

RDM – Recreational Demand Model; CVM – Contingent Valuation Method

¹ 43 CFR Sec. 11.83(c)(1)

² The description is from Montana v. ARCO Litigation and Consent Decree, by Robert M. Gentry, National Environmental Enforcement Journal, November 1998.

³ Assessment of Damages to Anglers and Other Recreators from Injuries to the UCFRB, by Dr. Edward R. Morey, et. al, January 1995 and the Revised Report and Rebuttal: Assessment of Damages to Anglers and Other Recreators from Injuries to the UCFRB, October 1995.

¹ Contingent Valuation of Natural Resource Damages Due to the Injuries to the UCFRB, by Dr. William D. Schulze, et. al, January 1995

The recreation valuation study was used to estimate use values for fishing and non-fishing recreation along the Clark Fork River and Silver Bow Creek for Montana residents and nonresidents. It did not evaluate recreation use value for injuries at sites other than along the Clark Fork River and Silver Bow Creek. The recreation demand model was used to estimate the number of additional fishing trips that would occur in the absence of injuries to the Clark Fork River and Silver Bow Creek. Then the ratio of change in non-fishing recreation trips compared to the change in fishing trips under baseline conditions was calculated. That ratio was then used to estimate the number of additional non-fishing recreation trips that would occur in the absence of injuries to the Clark Fork River and Silver Bow Creek. As shown in Table 2, non-fishing recreation uses along river corridors that were surveyed included activities such as rest and relaxation, walking or hiking, observing wildlife, biking, camping, recreational boating, waterplay, hunting, and other activities. This survey, however, was just one of a number of surveys used to estimate the relationship between non-fishing and fishing recreation in the immediate river corridor. The following explanation provided in the summary report for compensable damages offers reasons why the lawsuit covered both fishing and non-fishing recreation:⁵

The release of hazardous substances and many of the same natural resource injuries that impact the fishing experience also impact the quality and quantity of non-fishing recreation. Injured water quality, injured fisheries and other aquatic life, contaminated streamside soils, reduced vegetation, and reduced wildlife can directly impact the ability of natural resources along the upper Clark Fork River and Silver Bow Creek to provide non-fishing recreation service flows, and therefore result in compensable use value damages. For example, the streamside tailings that impact the fishery also reduce vegetation and the desirability of a site for non-fishing recreation.

The contingent valuation study estimated all use and nonuse values for all natural resource and natural resource service flow impacts at the four Clark Fork National Priority List sites, but only for Montana residents. Unlike the recreational demand model, this methodology covered more than just recreational uses. It involved using a structured interview process to quantify the use and nonuse values associated with partial and complete cleanup of the Clark Fork National Priority List sites. The contingent valuation study elicited two values from Montana residents with respect to injured natural resources in the UCFRB:

- 1) the value Montana residents would place on the resource in their uninjured state, derived by asking respondents what they would be willing to pay annually for 10 years to achieve complete cleanup of the injured natural resource; and
- 2) the value Montana residents would place on the resources in an improved but still injured condition, derived by asking respondents what they would be willing to pay annually for 10 years to achieve partial cleanup, which is defined as the conditions that are consistent with or will exceed the conditions that will exist upon the performance of response actions by the U.S. Environmental Protection Agency (EPA).

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⁵ Revised Report and Rebuttal: Assessment of Damages to Anglers and Other Recreators from Injuries to the UCFRB, October 1995, p. 8-1.

Table 2* 1978 Participation Estimates for Upper Clark Fork River Study Area**				
	(June 1, 1978 –	(September 5, 1978 –		
Activity	September 4, 1978)	May 31, 1979)		
Public Sites				
Fishing	23,364	7,632		
Float Fishing	1,565	58		
Rest or Relaxation	2,571	523		
Walking	279	262		
Picnicking	2,236	363		
Sightseeing	894	0		
RV Camping	13,470	872		
Water Play	3,857	58		
Photography	56	102		
Tent Camping	3,577	582		
Floating	1,900	262		
Nature Study	56	218		
Mushroom or Berry Picking	280	0		
Trail Biking	671	0		
Hunting (total)	168	3,344		
Big Game		58		
Waterfowl		3,068		
Upland Game Birds		218		
Other	950	262		
TOTALS				
Public Sites	55,894	14,538		
Private Campgrounds****	26,529	5,670		
Public and Private	82,423	20,208		

^{*} From: Assessment of Damages to Anglers and Other Recreators from Injuries to the UCFRB, by Dr. Edward R. Morey et. al. January, 1995

^{**} Source: Hagmann, 1979. Private campground use is not disaggregated by activity type. The study area included the Little Blackfoot River, Flint Creek, Rock Creek, and Warm Springs Creek; these figures do not include recreation at Rock Creek. About 48% of summer use is on the upper Clark Fork River, and about 62% of all visits are for the primary use of fishing.

^{***} Winter use was not estimated at Flint Creek, Little Blackfoot River, or Warm Springs Creek.

*** The breakdown of campground use by activity can be approximated using Table 2 in the Hagmann study.

The State's total compensatory damage claim was \$410.5 million. Table 1 provides a breakdown of the compensable damage claim for the three types of injured resource categories. Table 3 provides breakdown for the entire NRD claim. The compensable damage claim was 54% of the State's total 1995 NRD claim.

It is important to note that only four of nine injured areas had an associated lost recreational service that was covered in Montana v. ARCO: The Silver Bow Creek Aquatic and Riparian Resources, the Upper Clark Fork River Aquatic and Riparian Resources, the Smelter Hill Area Upland Resources, and the Anaconda and Opportunity Ponds and Other Anaconda Area Resources. For the latter site, groundwater injury was the major damage claim, but the lawsuit also covered riparian terrestrial resource injuries (i.e., injuries to soils, vegetation, wildlife, and wildlife habitat) at the Opportunity Ponds. Lost recreational services were not specific to the State's claim for the other five injury sites that primarily involve injured groundwater (Butte Hill Groundwater Resources, Butte Area One Ground and Surface Water Resources, Montana Pole Groundwater and Soil Resources, Rocker Groundwater and Soil Resources, and Milltown Groundwater Resources).

The State reached a partial settlement with ARCO in 1999 that resulted in, among other awards, \$129 million (including \$9 million in interest) for natural resource damages. This damage award was not specific to either a restoration damage or compensable damage; it was a settlement for restoration damages totaling \$135.4 million for six of the nine injured areas covered under Montana v. ARCO and for compensable damages totaling \$410.5 million for all of the sites. Similarly, the *RPPC* does not earmark any portion of this damage award to a particular injured resource or lost service.

⁶ The Butte Area One Groundwater and Surface Water Resources does include the uppermost portion of Silver Bow Creek upgradient of the Colorado Tailings, which is about 2.8 stream miles. There were lost recreational services associated with the injured aquatic resources in this section of Silver Bow Creek.

Table 3. NATURAL RESOURCE DAMAGE CLAIM (Dec. 1996)

COMPENSABLE DAMAGES	\$ Millions
RECREATION STUDY	
Resident	22.4
Non Resident	45.9*
TOTAL	68.3
CONTINGENT VALUATION STUDY	
Aquatics	130.7
Terrestrial	112.4
Groundwater	121.5
TOTAL	364.6*
GROUNDWATER STUDY	
Scenario #1	50.7
Scenario #2	89.1
Scenario #3	210.8
RESTORATION COST DAMAGES	
Butte Hill	54.5
Area One (Butte)**	79.5
Silver Bow Creek	57.8
Montana Pole	19.5
Anaconda Uplands**	40.4
Clark Fork River**	86.4
Natural Recovery	3.6
TOTAL	341.7*
ASSESSMENT and ENFORCEMENT COSTS	12.3*
TOTAL CLAIM	764.5

Note: The shaded lines indicate the studies and damages that were used as the basis for the State's \$410.5 million compensable damage claim. These studies are described in Section II.

^{*} Values used for total NRD claim

^{**} The restoration costs damages for these three injured areas were not covered in the 1999 partial settlement of $\underline{\text{Montana v. ARCO}}$ and are still being litigated.

III. Legal Framework for Expenditure of Restoration Funds

The federal Superfund law and Department of Interior NRD regulations⁷ require that any natural resource damages recovered in the lawsuit be used for the restoration, replacement, or acquisition of the equivalent of the injured resources.

- Restoration refers to actions taken, in addition to remediation, to return **the injured resources and services** to their baseline condition. For example, planting additional grasses, shrubs and trees in the Silver Bow Creek floodplain that would not be planted under remediation would help restore the area.
- Replacement actions create or improve resources and services that are the **same as or substantially similar to** the ones that have been injured or lost, but away from the immediate site of injury. For example, improving a streambank and aquatic habitat in a tributary stream to Silver Bow Creek constitutes replacement.
- Acquiring equivalent resources involves obtaining unimpaired resources comparable to
 those that are injured. For example, acquiring land along an uncontaminated tributary
 stream and providing public access to it constitutes acquiring an equivalent resource.
 Typically, acquisition projects are lumped under the general category of replacement
 projects.

The RPPC (p.30) incorporates these legal restrictions via the following legal threshold criterion, which is one of five minimum qualification criteria that the NRDP uses to initially screen projects for funding consideration.

That the proposed project would significantly restore, rehabilitate, replace or acquire the equivalent of the natural resources injured as a result of releases of hazardous substances by ARCO or its predecessors that were the subject of Montana v. ARCO. For research projects, this requirement means that the project must provide significant information regarding restoration of injured resources in the UCFRB.

If a project strictly involves restoring an injured natural resource, then the lost recreational services associated with that injury resource can usually be restored as well. Take the example of the additional plantings in the Silver Bow Creek floodplain beyond the plantings done under remediation. This will improve fish and wildlife habitat and thereby enhance the recreational opportunities associated with that fish and wildlife habitat. Improving the injured resource improves the services the resource can provide. Such projects are eligible for funding consideration based strictly on the legal threshold criterion, however, there are other *RPPC* criteria that also affect funding eligibility that would also need to be met.

For a replacement project, the key to meeting the legal threshold criterion is the requirement that the resources and services that are created, improved, or acquired are "the same or substantially similar to" or "comparable to" injured natural resources and lost services. The four injured areas

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⁷ These requirements are set forth in Section 107(f) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the DOI NRD regulations, 43 Code of Federal Regulations Part II.

that had associated lost recreational services addressed by Montana v. ARCO include the injured aquatic and riparian terrestrial resources of Silver Bow Creek and the Clark Fork River, the injured riparian terrestrial resources of the Opportunity Ponds, and the injured upland terrestrial resources of the Anaconda Uplands. The comparability of proposed replacement recreational services to the lost recreational services covered under Montana v. ARCO is the crux of the legal threshold determination, regardless of whether the proposed project is or is not in one of these four injured areas. The compensable damages for lost use of natural resources covered in Montana v. ARCO included the loss of fishing and hunting recreational services as well as non-fishing and non-hunting recreational services such as picnicking, hiking, walking, bird-watching, water-play, and open space enjoyment in these injured riparian and upland areas. The closest substitute (i.e. best replacement alternative) to restoring services in these injured areas via restoring the injured resource is to provide lost services in areas similar to the river, stream, and upland environments that are comparable to these injured areas.

The State's legal threshold analysis evaluates whether a project's intended use of restoration funds substantially involves, as opposed to marginally or incidentally involves, restoration or replacement of injured natural resources or lost services. In evaluating whether a project meets this legal threshold, it is important not only to consider the focus of the requested UCFRB restoration funds but also to consider the entire project as it is intended to exist once it is fully completed and how UCFRB restoration funds are linked to these final intended uses.

Recreational projects can either "stand alone" or be connected to improvements in injured or replacement natural resources. An example of a "stand alone" recreational project would be the purchase of land for and development of a fishing access site on a tributary that supports quality fishery resources but lacks public access. An example of connected project would be a stream restoration project that also offered additional fishing access. Generally, projects such a the latter one that will improve both the resource and the recreational resources associated with the resource will rank higher under the *RPPC* ranking process than projects that strictly provide recreational services, but this may not always be the case.

A general rule of thumb for recreational projects is that the recreational services developed need to be compatible or in balance with the natural resources those recreational services are derived from. For example, a project that proposes to develop a trail in a waterfowl nesting area might be detriment to the resource if the increased public access will decrease nesting activity.

IV. Checklist for Applicants to Consider

The following section offers a list of questions applicants for recreational projects should ask about their projects to ascertain how well the project might meet the legal criterion of restoring or replacing injured natural resources or lost services. Applicants should refer to "Fact Sheet on Injuries along the UCFRB" provided Appendix A (attached) and to the *RPPC* in comparing the natural resources and services associated with their proposal to the injured natural resources and lost services covered under Montana v. ARCO.

- 1. What is the primary purpose of your recreational project? (Note: One of these three purposes should apply. The majority of the project funds should be devoted to the primary purpose.)
 - a. Will it restore an injured natural resource(s) covered by <u>Montana v. ARCO</u> and restore recreational services provided by that resource? Specify which of the injured resources and lost services identified in Appendix A this project will restore.
 - b. Will it create or enhance fishing or hunting outside of an injured area?
 - c. Will it create or enhance recreational services other than fishing and hunting outside of an injured area?
- 2. If you responded (c) to question #1. above, describe how the recreational service(s) the project will provide are substantially similar to the lost service covered under Montana v. ARCO.

If you are having difficulty demonstrating a strong similarity, then it is best to consult the NRDP before putting much effort into the project application.

V. Types of Recreational Projects

This section provides examples of recreational projects that meet the legal threshold and have been approved for funding and hypothetical examples of other projects. The approved projects are exemplary of the types of projects that fit the legal threshold criterion. The hypothetical examples are of a general nature because it is difficult to anticipate all the various aspects of potential proposals. While there are certainly some projects that clearly do or do not meet the legal threshold criterion, there are many projects that are likely to fall in a "grey zone" where this determination cannot be made until details are provided.

Approved Projects

The following discussion demonstrates how some of the projects approved for funding that involved providing recreational services met the legal threshold criterion. This discussion summarizes analyses provided in the annual UCFRB restoration grant work plans, which are available upon request from the NRDP or from the NRDP's website under "Montana Lands" at http://www.doj.state.mt.us/lands/default.asp

Douglas Creek Recreation Area and Fishery Project Development Grant: This project involved assessing the feasibility of re-establishing the Douglas Creek reservoir, which had once supported a healthy trout population and recreational fishery. The NRDP determined that the project met the legal threshold because it will replace services, trout fishing and other recreational activities, that were considered substantially similar to those lost. These services are not considered the same as those lost, however, since they involve a reservoir fishery and not a stream or river fishery. In this case, enhancing trout populations and associated fishing opportunities was considered a close enough substitute for the lost fishing opportunities covered under Montana v. ARCO.

Tributary Improvement Projects: The State has funded several projects that are aimed at improving trout populations on tributary streams in the Basin. Those projects include five project development grants (Lower Little Blackfoot River, Upper Willow Creek, German Gulch, Myers Dam Diversion, Twin Lakes Diversion) and two restoration grants (Lost Creek, Antelope and Wood Creeks). By improving the trout populations, these projects will improve trout fishing opportunities, a lost service covered under Montana v. ARCO.

Land Acquisition Projects: The State has funded four land acquisition projects that involved acquiring, either through fee title or easement, quality fish and wildlife habitat (the Watershed Land Acquisition, the Z-4 Ranch Conservation Easement, the Stuart Mill Bay Recreation Area, the Manley Ranch Conservation Easement). This habitat was considered substantially similar to the fish and wildlife habitat covered under Montana v. ARCO, as were the recreational services supplied through these acquisitions. For example, at Stuart Mill Bay, the State acquired fish and wildlife habitat and public access for fishing, boating, hunting, birdwatching, wildlife viewing, camping, and other land and water based recreational uses. The project benefits fish and wildlife habitat (e.g. trout habitat and wetlands) and populations (waterfowl, trout, moose, eagles) that are equivalent to the injured resources addressed by Montana v. ARCO. The fishing opportunities preserved are associated with lake fishing rather than the stream fishing opportunities that were lost in the UCFRB. Thus, the project provides some recreational services that are the same as and some recreational services that are substantially similar to the lost recreational services addressed by Montana v. ARCO.

Silver Bow Creek Greenway: This project will develop a recreational trail corridor and to restore aquatic and riparian resources along Silver Bow Creek between Butte and Anaconda. It will provide some of the same services that were lost as a result of natural resource injuries, such as fishing, hiking, bird watching, wildlife viewing, and open space enjoyment. Although the project will also provide services that are different than the services lost or impaired, such as bike riding opportunities, the project's focus is to provide some of the same or similar services as those lost or impaired.

The State received numerous public comments, particularly in the Pilot Year 2000 grant cycle, that questioned the appropriateness of the access features proposed with the Greenway project, such as restrooms, picnic shelters, picnic tables, and bridges. Some of the planned facilities were considered extravagant and unrelated to restoration goals. The State's general response to these concerns was:⁸

The damages recovered in the Montana v. ARCO lawsuit are intended, in part, to compensate the public for their lost ability over the last century to use Silver Bow Creek and its attendant resources for recreational purposes. It is recognized that the amenities the commentators object to will facilitate future access and recreation along the Creek to a degree that would not otherwise be available in a natural setting. It is felt that such conveniences are justified in this case for those in the UCFRB, and particularly the elderly and disabled, who have for so long been unable to use these public resources.

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⁸ The State of Montana's Responses to Public Comments on the Draft Pilot Year 2000 UCFRB Restoration Work Plan. NRDP. December 2000.

The State also addressed in its response why particular features were considered appropriate to managing public use and keeping people on the trail and out of sensitive areas such as revegetated areas in the floodplain. This evaluation was specific to the Silver Bow Creek corridor, the specific detailed proposal being considered, and the anticipated heavy public use of the first few trail miles. The same features or level of development will not necessarily be appropriate with similar proposals in other areas.

Hypothetical Projects

Skateboard park: Skateboarding is not a recreational use that is the same or substantially similar to the lost recreational services covered in <u>Montana v. ARCO</u>. If the primary purpose of the park would be for skateboard use, the project would not meet legal threshold criterion. That does not mean that if a recreational project creates a trail that could be used by skateboarders, such as the Greenway project, that the project is ineligible. The evaluation of the legal threshold focuses on what will be the project's primary purpose and, in this case, the Greenway project's primary purpose is not to create a skateboard park.

Campground facilities: Such a project would be eligible for funding consideration. In the recreation valuation study used to help determine the compensable damage claim, camping was included in the survey on non-fishing recreation. This study addressed non-fishing recreation along river corridor, which is shown in Table2. As noted in the *RPPC* (p. 48), "In a situation where there has been a loss of recreational opportunities generally, it might be worthwhile to improve existing recreational facilities such as trails, boat ramps, and campgrounds." While using restoration funds for improving or developing a campground can be an eligible project for funding consideration, the facility must be publicly owned and operated. Montana v. ARCO covered lost services to the public, not to private entities. Similarly, restoration funds must be for the public's benefit, and not for private profit.

Indoor hockey rink facility: Such a facility is not comparable to any recreational service connected to the injured natural resources covered under <u>Montana v. ARCO</u> and thus would not be eligible for funding consideration based on the legal threshold criterion.

Waterfowl viewing area: Montana v. ARCO covered the loss of waterfowl habitat along the riparian corridor of Silver Bow Creek and the Upper Clark Fork River and within the Opportunity Ponds area. Associated with the loss of this habitat came the public's loss of waterfowl viewing and hunting. The development of a waterfowl viewing area would be eligible for funding consideration based on the legal threshold criterion.

Golf Course: There are no substantial similarities between a developed golf course and the recreational opportunities that were lost due to injuries to natural resources in the UCFRB. A golf course would not be eligible for funding consideration based on the legal threshold criterion.

Fishing Pond for Kids: Such a project would provide fishing opportunities that are considered not the same as, but similar enough to, the lost fishing opportunities covered under <u>Montana v.</u> ARCO. It is not the considered the same because it would involve a "put and take" pond fishery

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⁹ Revised Report and Rebuttal: Assessment of Damages to Anglers and Other Recreators From Injuries to the UCFRB, prepared for the NRDP by Hagler Bailly Consulting, Inc., October 1995.

rather than a stream or river fishery. This type of project would therefore eligible for funding consideration based strictly on the legal threshold criterion. Such a project should be planned in consultation with MFWP fisheries experts.

VI. Frequently Asked Questions

Following are answers to frequently asked questions that NRDP has received specific to recreational projects. In addition, the UCFRB Restoration Grants Long-Form grant application also has a section on frequently asked questions pertinent to the application process. The application is available from the NRDP upon request or can be downloaded from the NRDP website at http://www.doj.state.mt.us/lands/naturalresource.asp.

Q: I'm not sure if the recreational project I'm considering meets the legal threshold. Should I go ahead and submit an application applicant to "test the waters"?

A: We encourage prospective applicants **not** to spend a lot of effort on an application for a project that questionably meets the legal criterion. We recommend that you instead submit a Pre-application, which consists of a project abstract and a map. It offers an applicant the opportunity to obtain a non-binding opinion from the State on whether a particular conceptual proposal may be an appropriate project for funding out of the UCFRB Restoration Fund before going through the more time-consuming process of preparing a project application. The NRDP makes the initial recommendation on a Pre-Application, which is then considered by the Advisory Council and then the Trustee Restoration Council, which makes the final determination. Details on what to include in the project abstract are available from the UCFRB Restoration Grant application (either the Short or Long form).

Q: Must there be a complete match between the services that were lost and the services being acquired or replaced?

A: The *RPPC* states (p. 48): "A complete match may not occur between the services that were lost and the services being acquired or replaced. A loss of recreational boating at a site may be replaced with riparian enhancements at the site to enable bird-watching opportunities. Or, upland wildlife habitat could be acquired or enhanced to replace an injured riparian habitat."

An important factor when conducting an acquisition or replacement project is to look at the services that will be provided and see how well they match the lost services covered in <u>Montana v. ARCO</u>. As with the above examples, the bird-watching and wildlife habitat were lost services identified with the aquatic or terrestrial injured resources (see "Fact Sheet on Injuries along the UCFRB" in Appendix A).

Q. What recourse do I have if I disagree with a staff determination that my project does not meet the legal threshold criterion?

A. The legal threshold criterion is one of five criteria in the NRDP considers in evaluation whether and application meets minimum qualifications. If the NRDP determines a project does not meet one or more of the five minimum qualification criteria for funding, the applicant, within 15 days of receiving written notice of this determination, may appeal the determination to the

Trustee Restoration Council. The Trustee Restoration Council has developed an appeal procedure that is available from the NRDP upon request.

Q. Even though all the compensable damages were settled, are there areas in the UCFRB that are off-limits to funding for recreational projects?

A. There are some areas still subject of pending litigation or final remedy decisions where recreational projects might not be eligible for funding determination, but this determination needs to be done on a case-by-case basis. We suggest you consult the NRDP or submit a Preapplication before spending a lot of time and effort on an application for a recreational project in any of the three areas that are still the subject of NRD litigation. Those areas are:

- 1) Smelter Hill Area Upland Resources ("Anaconda Uplands"): The Anaconda Uplands is an area approximately 18 square miles north and south of Anaconda that is comprised of portions of Smelter Hill, Stucky Ridge, and the Mount Haggin Game Management Area.
- 2) Butte Area One Ground and Surface Water Resources: Butte Area One extends from the upper end of the Metro Storm Drain in Butte to the west or downstream end of the former location of the Colorado Tailings along Silver Bow Creek; and
- 3) Upper Clark Fork River Aquatic and Riparian Resources: The Upper Clark Fork River site encompasses the floodplain of the Upper Clark Fork River from the Warms Springs Ponds to the Milltown Reservoir.

As set forth in the minimum qualifications in the *RPPC*, if consideration or implementation of a project would interfere, potentially interfere, overlap, or partially overlap with the State's remaining natural resource damage claims in the <u>Montana v. ARCO</u> lawsuit or with proposed restoration determination plans for these three sites, the project is not eligible for funding consideration. Such grant projects, which include restoration actions or property acquisitions within the Upper Clark Fork River floodplain, will not be considered until both completion of <u>Montana v. ARCO</u> and issuance of the Superfund Record of Decision (ROD).

The *RPPC* also indicates that projects proposed in areas that are the subject of pending RODs will not be considered for funding at this time. The EPA has not completed its determination of the final remedy for the Upper Clark Fork River between the Warm Springs Ponds and Milltown Reservoir or the Butte Priority Soils operable units. The Butte Priority Soils Operable Unit encompasses the part of Butte north of Silver Bow Creek, east of Montana Tech, the town of Walkerville, and extends south from Silver Bow Creek to Timber Butte. Butte Area One is part of this operable unit. Furthermore, projects in other Superfund operable units, particularly those such as Anaconda, where the remedial design has not been completed, may also be denied on the grounds of potential interference with the remedial action.

For example, consider a project to locate a fishing access site along the banks of the Clark Fork River in the injured area corridor where contaminated soils exist. The EPA remediation plan may require large-scale tailings treatment or removal or stream bank stabilization activities that

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¹⁰ The ROD for the Upper Clark Fork River is scheduled to be issued in summer of 2003 and the ROD of the Butte Priority Soils Operable Unit may be issued in late 2003. These dates are subject to change.

would interfere with a fishing access site at this location. A possibility exists, too, that some of the work needed to develop the fishing access site, such as contouring work, would be part of the final site reclamation under remediation. This type of project would potentially interfere with pending remediation and, therefore, cannot be considered until the extent of remedial actions to be conducted at the site is well defined.

Finally, projects located in the Big Blackfoot River watershed are ineligible for funding at this time. As set forth in the *RPPC*, no work in the Big Blackfoot River watershed will be considered until there is scientific determination that efforts to restore native trout restoration in the UCFRB would be uneconomical or impractical. This could be well after implementation of the response actions along the Upper Clark Fork River. Projects in the Big Blackfoot River watershed would be rejected at the minimum qualifications stage.

APPENDIX A FACT SHEET ON INJURIES ALONG THE UPPER CLARK FORK RIVER BASIN

AQUATIC RESOURCE INJURIES

- ✓ Surface Water Resources: Surface water concentrations of copper and zinc exceed aquatic life criteria virtually all of the time in Silver Bow Creek and periodically along the 120 miles of the Clark Fork River.
- ✓ Sediments: Sediments are highly contaminated along Silver Bow Creek and the Clark Fork River. Bed sediments contain copper concentrations that exceed baseline conditions by, on average, factors of 25 on the Clark Fork River and a factor of 500 on Silver Bow Creek.
- ✓ Aquatic Insects: Aquatic insects contain elevated concentrations of metals in both Silver Bow Creek and Clark Fork River. Particular species have been reduced in quality or, in Silver Bow Creek, eliminated.
- ✓ *Fish:* Trout populations are absent from Silver Bow Creek. The Creek should contain about 190 trout/mile according to the 1994 survey. In the Clark Fork River, trout populations are about one-fifth of the populations found in reference streams.
- Services: The services lost or impaired by aquatic injuries include lost fishing and many other recreation opportunities that accompany fishing such as boating, water play, hiking, camping, and observing wildlife.

TERRESTRIAL RESOURCE INJURIES

✓ Aquatic Terrestrial Injuries: 750 acres of floodplain along Silver Bow Creek and 215 acres along the Clark Fork River (Warm Springs Ponds – Deer Lodge) contain tailings which have eliminated riparian wildlife habitat. There are additional acres of floodplain on Silver Bow Creek and Clark Fork River which contain metals enriched soils that are a source of metals to surface water and are phytotoxic to vegetation. Baseline vegetation contains a mixture of riparian forest/shrub communities and agricultural land uses.

Populations of otter, mink and raccoons have been eliminated from Silver Bow Creek and severely reduced in the Clark Fork River. Baseline reference sites on the Big Hole River have significantly more signs of otter, mink and raccoon. Populations of other types of wildlife have also been significantly reduced along Silver Bow Creek and the Clark Fork River, particularly along the upper one-third of the river.

- ✓ *Opportunity Ponds:* Terrestrial resources (soils, vegetation, wildlife and wildlife habitat) have been lost on the 3400-acre ponds.
- ✓ *Upland Terrestrial Injury:* Approximately 17.8 square miles (11,366 acres) of upland soils, vegetation, wildlife habitat, and wildlife have been injured. These phytotoxic soils are

lacking major indigenous plant associations. These areas are Mount Haggin (6.7 square miles); Smelter Hill (7.2 square miles); and Stucky Ridge (3.8 square miles). As a result, wildlife populations in these areas have been significantly reduced. Baseline areas have vegetative cover consisting of approximately 70% forest and 30% grassland for the Mt. Haggin and Smelter Hill areas. The Stucky Ridge area was mostly grassland.

Services: The services lost or impaired due to injuries to vegetation, wildlife and wildlife habitat include hunting, birdwatching, water play, hiking, observing wildlife and general recreation.

GROUNDWATER RESOURCE INJURIES

✓ Butte Area: The <u>bedrock groundwater</u> injury covers 7 square miles (4500 acres) and, at this time, has a volume of some 220,000 acre-feet. Less than half of this injured groundwater is in the Berkeley Pit at the present time. However, when the critical water level is approached, the volume of contaminated ground water in the pit will exceed the total volume of contaminated bedrock groundwater in the aquifer outside of the pit and the total volume of injured groundwater will be approximately 333,000 acre-feet.

The <u>alluvial groundwater</u> in the Butte Hill area has some 5000 injured acre-feet over a square mile. Injury at Butte=s Area One alluvial aquifer also extends over a square mile and is some 10,000 acre-feet in volume. The groundwater in both the alluvial and bedrock aquifers contain concentrations many times over baseline concentrations and drinking water standards for arsenic, cadmium, copper, lead, zinc, sulfate, iron and manganese.

- ✓ *Montana Pole & Rocker:* Montana Pole has 350 acre-feet of groundwater injury (organics) over 44 acres. Rocker has 190 acre-feet of injury (organic and inorganic) over a 26-acre area.
- Anaconda Area: Groundwater contamination at Anaconda extends over 40 square miles (25,000 acres) and totals more than 400,000 acre-feet. Most of the injury is in the upper alluvial aquifer, with the remaining injury found in the bedrock aquifer near Smelter Hill. Exceedances of drinking water standards exist for arsenic, cadmium, total dissolved solids, zinc, iron, manganese, and sulfate, with exceedances for the last 3 compounds extending over the largest area. EPA has found more groundwater contamination in the upland bedrock areas since the State=s injury report was released.
- ✓ *Milltown:* The volume of injured groundwater at Milltown is approximately 6500 acre-feet and extends over about 110 acres. Drinking water exceedances exist for arsenic, iron and manganese.
- ✓ *Services*: Services lost or impaired by injuries to groundwater include domestic and industrial consumption and uses.